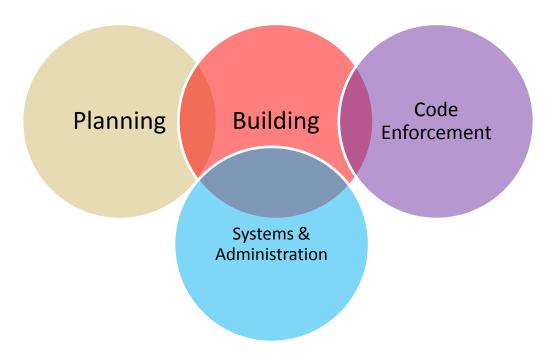
Community Development Department Organization



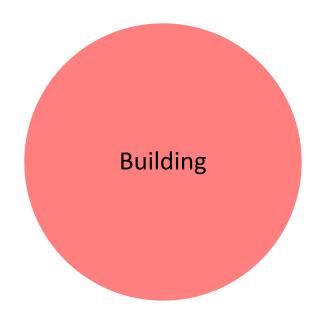
Community Development Department



Kimberly Brandt
Community Development
Director



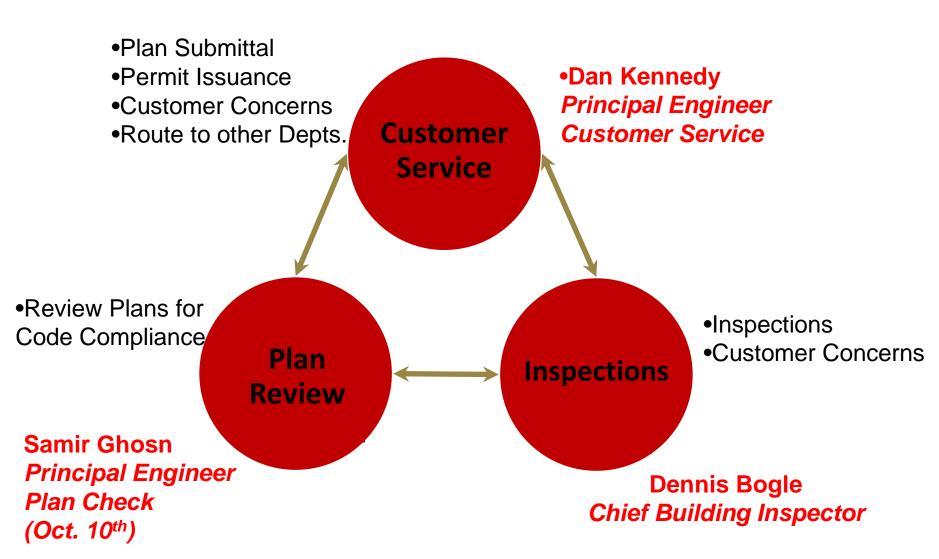
Building Division





Building Division

Seimone Jurjis – Chief Building Official





Structural Observation Policy



What is Structural Observation?

Defined in Section 1702

The visual observation of the structural system by a registered design professional for **general conformance to the approved construction documents.** Structural observation does not include or waive the responsibility for the inspection required by Section 110, 1704 or other section of this code.



Why a Structural Observation Policy?

California Building Code Section 1710.2

- 1. The structure is classified as Occupancy Category III or IV in accordance with Table 1604.5.
- 2. The height of the structure is greater than 75 feet above the base.
- 3. The structure is assigned to Seismic Design Category E, is classified as Occupancy Category I or II in accordance with Table 1604.5, and is greater than two stories above grade plane.
- When so designated by the registered design professional responsible for the structural design.
- 5. When such observation is specifically required by the building official.



California Building Code Section 1710.2

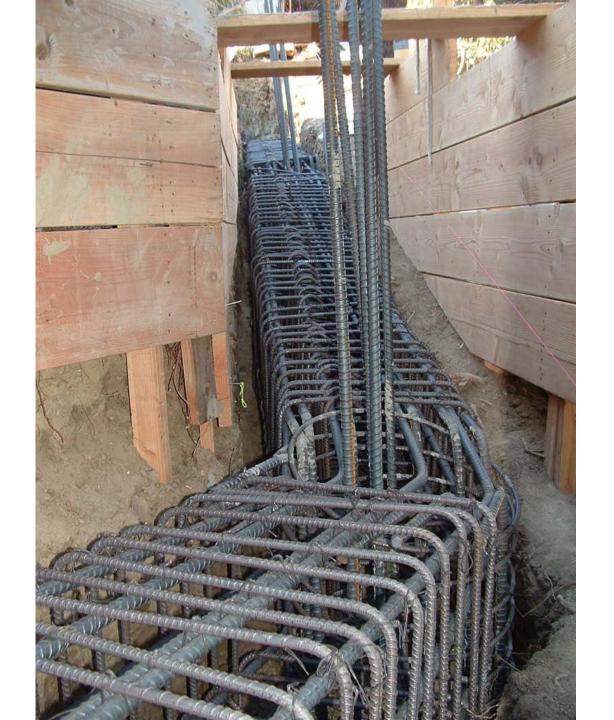
5. When such observation is specifically required by the building official.

•To standardize and document the requirements associated with Section 1710.2 condition number five above. Want the design professional involved in:

- Steel Moment Frames
- •Concrete Decks & Systems
- Complex Foundation Systems
- Shoring & Basements
- •3-Story or More
- Complex Framing
- Sea Walls
- •Hill Side Construction
- Liquefaction Areas



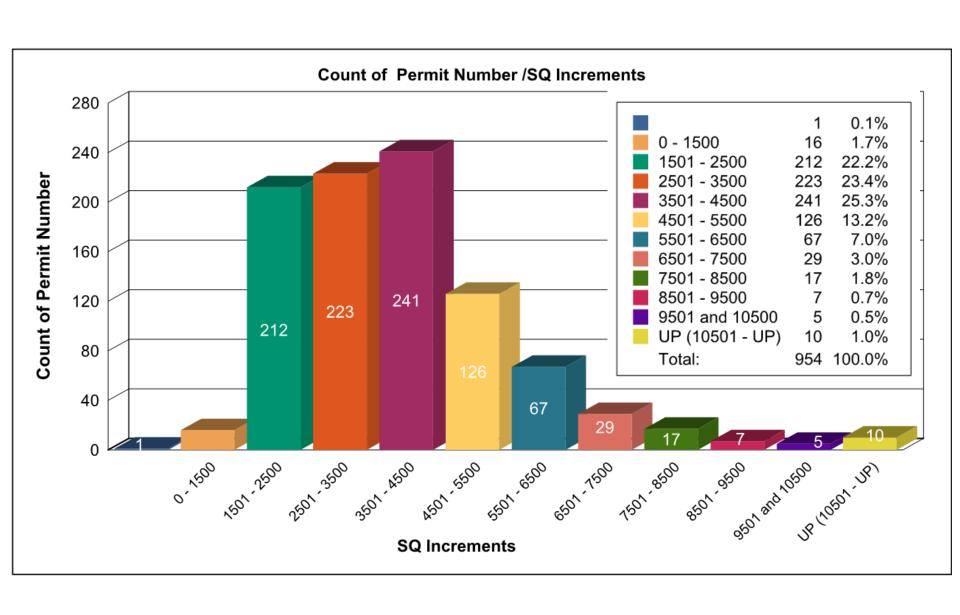




Data Collection

2010 - 2011

| TYPE OF PERMIT IOOUER | N | Dollar | Dwelling |
|-----------------------------------|--------|---------------|----------|
| TYPE OF PERMIT ISSUED | Number | Valuation | Units |
| Single Family Dwelling | 64 | \$52,723,252 | 64 |
| Duplexes | 13 | \$7,254,688 | 24 |
| Religious Building | 2 | \$475,000 | |
| Parking Garage | 1 | \$6,637,000 | |
| Professional Buildings | 4 | \$56,760,400 | |
| Restaurant | 1 | \$1,300,000 | |
| Other Non Residential Buildings | 4 | \$915,600 | |
| Patios/Decks/Trellis | 69 | \$1,800,224 | |
| Pools/Spas | 127 | \$3,963,660 | |
| Harbor | 56 | \$3,052,872 | |
| Residential Additions/Alterations | 1,284 | \$56,229,961 | |
| Commercial Additions/Alterations | 363 | \$76,121,214 | |
| Carport | 4 | \$333,500 | |
| Fire Sprinkler/Alarms | 513 | \$3,072,716 | |
| Demolitions: | | | |
| One-family dwelling | 59 | \$512,100 | (59) |
| Two-family dwelling | 9 | \$85,000 | (18) |
| Other than dwelling | 21 | \$102,180 | |
| Miscellaneous: | | | |
| Re-roofs (515) | | | |
| Fences/Retaining Walls (187) | 1,150 | \$25,487,784 | |
| Signs/Banners (185) | | | |
| * Misc. (263) | | | |
| TOTALS: | 3,744 | \$296,827,151 | 11 |



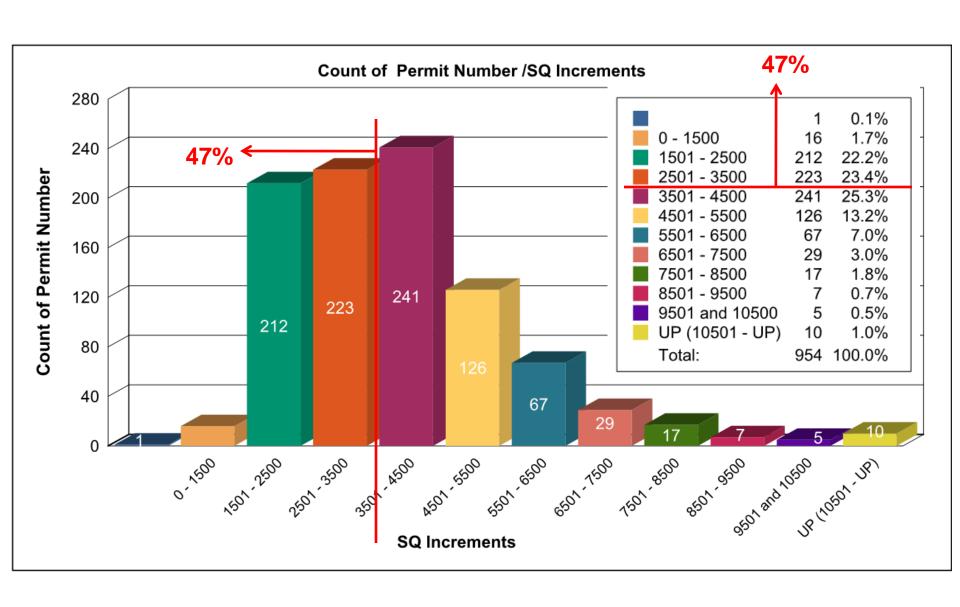
Policy

What is the Policy?

All structures are required structural observation.

Exceptions:

- 1. Wood framed structures complying with all of the following conditions:
 - a. Two story or less;
 - b. The gross area of work is less than 3,500 square feet;
 - c. All lateral forces are resisted by code compliant wood shearwalls; and,
 - d. A conventional foundation system is used.
- 2. Non-structural alterations regardless of floor area or use.
- 3. The Chief Building Official may make additional exceptions to the policy for conditions not stated above.



Structural Observation Comparison

| Project Description | 2010 CBC/CRC Structural Observation Required | CBC 1710 Policy Structural Observation Required |
|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------|
| Non-structural remodel: 1600 sf. 3 stories, kitchen and master suite | NO | NO |
| New SFD: 4000 sf. 1 story, slab on grade, complies with CRC braced walls systems | NO | YES |
| New Retail/Office Building: 3200 sf. 2 stories, slab on grade, wood shear panels | NO | NO |
| New Duplex: 3200 sf. 3 stories, wood shear panels and steel moment frames | NO | YES |
| New SFD: 3200 sf. 2 stories with basement, retaining wall foundation system | NO | YES |
| Major remodel: 3490 sf. 2 stories, slab on grade, existing wood shear panels, new steel frame | NO | YES |
| New SFD: 6000 sf. 2 stories, caissons and retaining wall foundation system (Structural Obs. required by the design engineer) | YES | YES |
| New Fire Station: 3000 sf. 2 stories, wood shear panels and conventional foundation system | YES | YES |

Impacts Time & Money



Impacts:

- 1. Time Lag to wait for an design professional to respond to the request for structural observation.
- 2. Cost associated with a structural observation by a design professional. Typically \$250 up to \$600 per site visit.



CITY-OF-NEWPORT-BEACH¶

$\begin{array}{c} \textbf{COMMUNITY} \cdot \textbf{DEVELOPMENT} \cdot \textbf{DEPARTMENT} \\ \textbf{BUILDING} \cdot \textbf{DIVISION} \end{array}$

BUILDING·CODE·POLICY¶

| Effective Date a | Subject | Policy·No.¤ | ø |
|---------------------|-------------------------|----------------|---|
| September·21,·2011¤ | Structural-Observation¤ | 2010·CBC·1710∞ | ¤ |

Per-California-Building-Code-Section-1710.2-condition-number-5, the-Chief-Building-Official-requires-Structural-Observation-for-all-new-construction, addition, alteration-or-reconstruction-of-structures.

EXCEPTIONS:¶

- 1. \rightarrow Wood-framed-structures-complying-with-all-of-the-following-conditions: \P
 - a.→Two·story·or·less;¶
 - b.→The gross area of work is less than 3,500 square feet; ¶
 - c.→All·lateral forces are resisted by code compliant wood shearwalls; and,¶
 - d.→A·conventional·foundation·system·is·used.¶
- 2. → Non-structural alterations regardless of floor area or use.¶
- 3. → As-designated-by-the-Chief-Building-Official.¶

1

DOCUMENTATION-OF-STRUCTURAL-OBSERVATION¶

Prior to the issuance of a building permit, the licensed design professional responsible for the structural design shall identify the construction stages and elements to be observed. The information shall be made a part of the approved construction plans and documents. In addition, for repetitive work involving similar or identical construction (i.e., floor construction at multi-story buildings), the licensed design professional responsible for the structural design may specify the location and/or frequency of structural observation required on the construction documents.

PERFORMANCE-OF-STRUCTURAL-OBSERVATION¶

The structural observer shall perform structural observation at each construction stage identified on the approved construction documents. Upon completion of structural observations for each construction stage, the structural observer shall complete and submit a structural observation report to the Chief Building Official.

When a deficiency is noted in the structural observation report, the structural observer shall give the report to the building owner or owner's representative, project contractor, and the Chief Building Official. The structural observer shall note on the report how

| correction of each observed deficiency will be verified.¶ |
|-----------------------------------------------------------|
|-----------------------------------------------------------|

| Upon-completion-of-the-structural-system-the-structural-observer-shall-submit-a-final- |
|---------------------------------------------------------------------------------------------|
| structural observation report to the Chief Building Official. The final report must state |
| that the structural system generally conforms to the approved construction documents |
| and that all observed deficiencies have been corrected. Final approval of the |
| structural-work-by-the-Chief-Building-Official-will-not-occur-without-the-final-structural- |
| observation-report.¤ |
| |

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|----------------|------------------------------------------|
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| | ¶ |
| | 1 |
| Authored·by: | ¶ |
| | Suzanne Kusik, Sr. Plan Check Engineer¶ |
| Approved by: | Ϊ |
| Approved by: _ | Seimone Jurjis, Chief Building Official¶ |
| | ņ |



CITY-OF-NEWPORT-BEACH¶

COMMUNITY-DEVELOPMENT-DEPARTMENT¶

BUILDING- DIVISION¶

3300·Newport·Boulevard·[-P.O.-Box·1768·[-Newport·Beach,- CA-92658¶ -www.newportbeachca.gov-[-(949)-644-3200¶

| | Stru | ctural·Obs | servation·Re | eport¤ | | |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|-----|
| Project-Address:= | | Report-date:= | | CNB·Inspector·Name:¤ | CNB-Permit#:= | |
| Building Owner Name:¤ | | Owner's Mailing add | dress-(if-different-from-site); | Owner's Telephone#:= | CNB-Plan-Check | #;= |
| Full-Name-of-Structural-C | Observer(SO):¤ | SO-email-Address: | 1 | SO:Telephone## | SO·License/-Reg | .#7 |
| PLEASE-IND | ICATE: STRUCTURAL | ·ELEMENTS·AND | ·CONNECTIONS·OB | SERVED-(check-applic | able·boxes)¤ | |
| FOUNDATIONS | SHEAR-WALL So | FRAMES | DIAPHRAGMS¶ (Floor/Roof)□ | INDICATE-LOCATION OBSERVED | (S)· DATE· OBSERVE | |
| □-Conventional- Footings-&-Slab¤ | □-Concrete¤ | □-Steel≭ | □-Concrete¤ | Ħ | Ħ | |
| □-Mat-Foundation, Prestressed-Concrete | □-Masonry¤ | □-Concrete-¤ | □-Steel-Deck¤ | Ħ | Ħ | |
| □-Caissons, Piles, Grade-Beams¤ | □-Wood-or-Manuf Shear-Panels¤ | □-Masonry≭ | □-Wood¤ | н | Ħ | |
| □-Other:¤ | □-Other:¤ | □-Other:¤ | □-Other:¤ | д | Ħ | _ |
| □-ITEMS·CHECKED: | ABOVE·ARE·APPROVE | D-AND-WITHOUT-D | EFICIENCIES.0 | | | _ |
| □-OBSERVED-DEFIG | CIENCIES:AND:COMME | NT S:0 | | | | _ |
| 0 | | | | | | _ |
| = | | | | | | _ |
| = | | | | | | _ |
| | | | | □-REPORT-CONTINUED-O | N-ATTACHED-PAG | ES. |
| | RAL-OBSERVATION-RE | | | | | |
| The structure genera | lly-complies-with-the-ap | proved-construction | on documents, and all o | bserved deficiencies we | re-corrected.¤ | — |
| I-declare-that-the-follow | wing-statements-are-true-f | to the best of my kno | wledge:¶ | | p p | |
| charge of the str 2.→1, or another licer my responsible of construction sta approved constr 3.→1 understand that | design-professional-re uctural-observation,¶ sed-design-professional- narge, have-performed- ge-to-verify-that-the-str- uction-documents,¶ all-deficiencies-which-ha- of-the-structural-system | vhom-l-have-designa the-required-site-vis ucture-is-in-general- ave-documented-mus | ated above and is under- sits at each significant- conformance with the- st-be-corrected, prior to- | | | |
| | | | | | | |
| | TURAL OBSERVER OF RE | | DATE= | ·····STAMP·OF·STRUCTU | JRAL-OBSERVER= | |

STRUCTURAL-OBSERVATION-DOES-NOT-WAIVE-ANY-REQUIREMENTS-FOR-BUILDING-INSPECTION-BY-AUTHORIZED-EMPLOYEES-OF-THE-CITY-OF-NEWPORT-BEACH.®

STRUCTURAL-OBSERVATION-REPORT-INSTRUCTIONSII

When structural observation is required for a project, the structural observer shall perform site visits at significant construction stages throughout the progress of the work. Site visit frequency shall allow for correction of observed deficiencies without substantial effort or uncovering of the completed work. Structural observation site visits shall be performed for each construction stage identified on the approved construction documents.

The structural observer shall utilize the City of Newport Beach "Structural Observation Report" form, to record the required observation visits. All structural observation reports shall include the license stamp and wet signature of the structural observer responsible for the project.

ÖBSERVED-DEFICIENCIES¶

When a deficiency is noted, the structural observer shall give copies of the completed structural observation report to the owner or owner's representative, project contractor, and the Chief Building Official.

II
The contractor shall resolve all deficiencies prior to final inspection or acceptance of the structural workby the Chief Building Official.¶

FINAL·STRUCTURAL·OBSERVATION·REPORT¶

The structural observer shall submit a final structural observation report to the Chief Building Official, or designee, upon completion of the structural systems. "The final structural observation report shall state that the structural systems conform to the approved construction documents and that all previously observed deficiencies have been corrected. "Final inspection or other acceptance of the structural system by the Chief Building Official, may not occur until the final structural observation report is received."

9

CITY-OF-NEWPORT-BEACH-¶

COMMUNITY: DEVELOPMENT: DEPARTMENT: |BUILDING: DIVISION¶

- 1.— STRUCTURAL OBSERVATION IS REQUIRED FOR THIS PROJECT IN-ACCORDANCE WITH CBC 1710 STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY A LICENSED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION OCCUMENTS. 1
- 2.→ STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FORTHER REQUIRED INSPECTIONS BY THE CITY OF NEWPORT BEACH.¶
- 3.— THE OWNER SHALL EMPLOY A LICENSED DESIGN PROFESSIONAL TO PERFORM STRUCTURAL OBSERVATION SITE VISITS, AND TO ISSUE ALL STRUCTURAL OBSERVATION REPORTS. (1)
- 4.— THE DESIGN ENGINEER SHALL IDENTIFY THE REQUIRED STRUCTURAL-OBSERVATION - SITE: VISITS: ON-THE-STRUCTURAL-OBSERVATION-SCHEDULE: 4
- 5.→ THE· REQUIRED· SITE· VISITS· SHALL· AT· A· MINIMUM· INCLUDE· THE· FOLLOWING.¶
 - A.→ OBSERVATION: OF THE FOUNDATION: SYSTEM: PRIOR: TO: FINAL: CONCRETE POUR:¶
 - B. OBSERVATION OF THE BUILDING FRAMING PRIOR TO CALLING FOR THE CITY OF NEWPORT BEACH "COMPLETE FRAMING INSPECTION"; AND. 1
- C. FINAL OBSERVATION OF THE COMPLETED STRUCTURE. ¶ ADDITIONAL SITE VISITS MAY BE NEEDED AS DETERMINED BY THE DESIGN-ENGINEER OR STRUCTURAL OBSERVER. ¶
- 6.— THE STRUCTURAL OBSERVER SHALL PREPARE A STRUCTURAL OBSERVATION REPORTFOR EACH STAGE OF CONSTRUCTION OBSERVED THE CITY OF NEWPORT BEACH "STRUCTURAL OBSERVATION REPORT FORM, OR A SIMILARLY FORMATTED REPORT, SHALL BE USED FOR ALL STRUCTURAL OBSERVATION REPORT. ¶

- 7.— IF: THE: CITY'S: FORM: IS: NOT: USED: REPORTS: SHALL: BE: ON: THE STRUCTURAL OBSERVER'S LETTERHEAD, STATE: THE: SITE ADDRESS, PLAN CHECK-AND PERMIT NUMBERS, STAGES AND ELEMENTS OBSERVED, DATE: OBSERVED, AND: COMPLETE: CONTACT: INFORMATION: FOR: THE STRUCTURAL OBSERVER: "¶
- 8.— ALL: STRUCTURAL: OBSERVÂTION-REPORTS; REGARDLESS: OF FORM USED, SHALLINCLUDE: THE LICENSE STAMP AND SIGNATURE OF THE STRUCTURAL OBSERVER RESPONSIBLE FOR THE PROJECT ¶
- 9.— EACH STRUCTURAL-OBSERVATION-REPORT SHALL BE GIVEN TO THE OWNER OR OWNER'S REPRESENTATIVE, PROJECT CONTRACTOR, AND THE BUILDING-INSPECTOR. 1
- 10.→ THE CONTRACTOR SHALL RESOLVE ALL DEFICIENCIES AND THE FINAL STRUCTURAL: OBSERVATION: REPORT: ISSUED: PRIOR: TO: FINAL INSPECTION: OR: ACCEPTANCE: OF THE STRUCTURAL WORK BY THE BUILDING INSPECTOR. ¶
- 11.→ THE FINAL STRUCTURAL OBSERVATION REPORT SHALL STATE THAT THE STRUCTURAL SYSTEMCONFORMS TO THE APPROVED CONSTRUCTION-DOCUMENTS AND THAT ALL PREVIOUSLY OBSERVED DEFICIENCIES HAVE-BEEN CORRECTED. ¶
- 12.— FINAL INSPECTION OR OTHER ACCEPTANCE OF THE STRUCTURAL SYSTEM BY THE CHIEF BUILDING OFFICIAL, OR DESIGNEE, WILL NOT OCCUR UNTIL THE FINAL STRUCTURAL OBSERVATION REPORT IS RECEIVED.
- 13.→ THE LICENSED DESIGN PROFESSIONALIN RESPONSIBLE CHARGE SHALL-PREPARE ALL CONSTRUCTION DOCUMENT CHANGES RELATING TO THE STRUCTURAL SYSTEMS, REVIEW AND APPROVAL OF SUCH CHANGES BY-THE CHIEF BUILDING OFFICIAL, OR DESIGNEE, SHALL BE OBTAIN BY THE DESIGN PROFESSIONAL ANDIOR CONTRACTOR PRIOR TO INSTALLATION, ANDIOR CONSTRUCTION OF SAID CHANGES. ¶...; Sedion Break (Continuous) ;...

STRUCTURAL · OBSERVATION · SCHEDULE¶

| SITE·AI | DDRESS:0 0 | | PC#:0 0 | |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------|-----|
| BASED C | OMPLETED BY THE DESIGN ENGINEER, AND INCLUDED ON THE PROJECT SCOPE, PLEASE IDENTIFY THE ELEME SE OF CONSTRUCTION WHEN THE STRUCTURAL OBSER | NTS AND/OR CONNECTIONS THAT REQUIRES | STRUCTURAL OBSERVATION. SPECIFY THE INTERV | ΆL· |
| TYPE | STRUCTURAL·ELEMENTS·AND/OR·¶ CONNECTIONS·TO·BE·OBSERVED¤ | SCHEDULED-INTERVAL | LOR-STAGE-OF-CONSTRUCTION-⊞ | |
| Su | □-FOOTINGS, SLAB FOUNDATION, ANCHORS® | 0 | | |
| FOUNDATIONS | ☐-MAT-FOUNDATION, PRESTRESSED CONC. SLAB® | 0 | | |
| OUND | □-CAISSON, PILE, GRADE BEAM® | 0 | | |
| ш | □-OTHER:0 | 0 | | |
| Su | □-CONCRETE® | 0 | | |
| SHEARWALLS | □-MASONRY∘ | 0 | | |
| HEAR | □-WOOD OR MANUFACTURED SHEAR PANELS® | 0 | | |
| v) | □-OTHER:0 | 0 | | |
| | □-STEEL-MOMENT OR-BRACED FRAME® | 0 | | |
| FRAMES | □-CONCRETE-MOMENT-FRAME® | 0 | | |
| 젎 | □-MASONRY-WALLFRAME∘ | 0 | | |
| | □-OTHER:0 | 0 | | |
| S | □-CONCRETE® | 0 | | |
| RAGII | □-STEEL DECK® | 0 | | |
| OLA PHRAGMS¤ | □-\WOOD∘ | 0 | | |
| | □-OTHER:□ | 0 | | |